

REMARKS

Claims 1-15 are pending in the present application. Claims 5 and 7-15 were previously withdrawn from consideration. Claims 1 is herein amended. No new matter has been entered.

It is respectfully submitted that this Amendment is fully responsive to the Office Action dated May 16, 2006.

Non-Responsive To Applicants' Previous Remarks

An Examiner is required to provide clear explanations for all actions taken by the examiner during prosecution of an application. MPEP 707.07(f) (The examiner should "take note of the applicant's argument and answer the substance of it.") This requirement is in addition to any repetition of a previously held position and is required to allow the Applicant a chance to review the Examiner's position as to these arguments and to clarify the record for appeal. However, in this Action, the Examiner failed to address the substance of Applicants' remarks provided in the November 18, 2005 Amendment. Thus, Applicants have not had the chance to review the Examiner's position to determine whether to further clarify the record for possible appeal. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection to claims 1-4 and 6.

However, in an effort to expedite prosecution and clarify the subject matter of the present invention, Applicants hereby address the Examiner's claim rejections below.

Claim Rejections - 35 U.S.C. §102

Claims 1-4 and 6 were rejected under 35 U.S.C. §102(b) as being anticipated by *Umematsu et al.* (U.S. Pat. 6,399,897).

Applicants respectfully disagree with the Examiner's position. However, to expedite prosecution and clarify the subject matter of the claimed invention, Applicants hereby amend claim 1 to recite that *said first and second guard rings being connected with each other mechanically and continuously by a bridging conductor pattern extending continuously in a band form along a region including said first and second guard rings, when viewed in the direction perpendicular to a principal surface of said semiconductor substrate*. Support for this amendment is found, for example, in Figure 3 of the above-identified application. Applicants respectfully submit that the cited reference fails to teach or suggest this feature described in the claims. Accordingly, in view of this amendment and the following remarks, Applicants respectfully request that the Examiner withdraw the anticipation rejection of claims 1-4 and 6.

Briefly, anticipation requires the presence in a single prior art reference the disclosure of each and every element of the claimed invention, arranged as in the claim. However, *Umematsu et al.* fails to disclose, teach or even suggest *a first guard ring (or second guard ring) extending continuously in said multilayer interconnection structure (formed on said semiconductor substrate) along a periphery of said semiconductor substrate*. Instead, *Umematsu et al.* teaches a multilayer printed circuit board, e.g., Fig. 5A of *Umematsu et al.* illustrates the structure of providing semiconductor chips 51 on a printed circuit board 12 (not a semiconductor substrate,

as mischaracterized by the Examiner.) Accordingly, *Umematsu et al.* fails to disclose every element of the claimed invention and is not a proper §102 reference.

Furthermore, Applicants respectfully submit that the cited reference fails to provide any motivation or suggestion for modifying the multi-layer wiring substrate of *Umematsu et al.* For example, FIG. 5 of *Umematsu et al.*, merely describes dummy vias 85a and dummy interconnection patterns 54a provided for the purpose of restricting deformation of the substrate at the time of CMP process. Please see column 4, lines 13-18.

According to column 5, line 30 of *Umematsu et al.*, for example, the *Umematsu et al.* device blocks the penetration of outside moisture “by sticking an end portion 62a of the frame body 62 to the conductors 60 via an adhesive layer”. There is no teaching or even suggestion that the dummy vias 58a and the dummy interconnection patterns 54a extend “continuously in a band form along a region including said first and second guard rings” as described in claim 1.

Moreover, with the presence of the frame body 62 blocking penetration of outside moisture in *Umematsu et al.*, there is no motivation for a person skilled in the art to modify the dummy vias 58a and the dummy interconnection patterns 54a to form the guard ring pattern as set forth in current claim 1.

Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claims 1-4 and 6.

Conclusion


In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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